

Combined Cartilage Restoration Rehabilitation Protocol
(Patellar Facet and Femoral Condyle)

Phase	Goals	Precautions/Restrictions	Treatment
Weeks 0-6	<ul style="list-style-type: none"> • Protect surgical site • Manage swelling and pain • Achieve and maintain good quadriceps activation • Reduce muscle atrophy 	<ul style="list-style-type: none"> • TWB with knee brace locked in extension with crutches • ROM as tolerated (Do not force) 	<ul style="list-style-type: none"> • PRICE • Quadriceps activation and strength should be emphasized • Knee flexion and terminal extension ROM • Gentle stretching of hamstrings, calf to tolerance • Ankle strengthening • OKC straight leg raises all planes (locked in extension) • Initiate stationary biking without resistance (within ROM limitations) • Modalities as indicated • Initial Visit: FOTO, LEFS
Weeks 6-8	<ul style="list-style-type: none"> • Progressive ROM • Reduce effusion to knee • Minimize muscle atrophy • Ambulate community distances by 12 weeks 	<ul style="list-style-type: none"> • WBAT progressing to WBAT in brace • Progressive range of motion (Do not force) • No impact (running, cutting, pivoting) • Avoid excessive patellar loading (avoid deep knee flexion, knees over toes) 	<ul style="list-style-type: none"> • Begin CKC strengthening (avoid anterior knee pain) • Limit loaded knee flexion angle to 30 degrees or less • Normalize calf, hamstring, quadriceps mobility • Modalities as indicated • Week 6: FOTO, LEFS
Weeks 8-12	<ul style="list-style-type: none"> • Achieve full ROM by 12 weeks • Achieve full weight bearing by 12 weeks • Wean fully from crutches • No effusion to knee • Restoring strength of quadriceps, hamstrings, hips 	<ul style="list-style-type: none"> • Discontinue knee brace when quad control achieved • No impact (running, cutting, pivoting) 	<ul style="list-style-type: none"> • Progress CKC into greater ROM (<90), single leg, multi-planar, and with resistance as tolerated • Initiate proprioceptive training • Initiate bike/elliptical for cardio fitness • Week 12: FOTO, LEFS

This protocol is not meant to be prescriptive but a recommendation to guide the rehabilitation process.
Each patient’s progress may vary based on specifics of their injury and procedure.

Weeks 12-24	<ul style="list-style-type: none"> • Preparation for more advanced exercise/activity • Initiation of sport specific drills (per MD) • Ready to begin impact by 6-9 months (per MD) • Normalize asymmetries 	<ul style="list-style-type: none"> • Loaded range of motion <90 degrees) • Proper exercise form and control during exercise performance 	<ul style="list-style-type: none"> • Progress strength, endurance, and proprioception • Advance cardiovascular conditioning • Week 24: SGYM with testing <ul style="list-style-type: none"> ○ Y- balance ○ Body weight single leg press ○ Humac testing (90/180 deg/sec) ○ FOTO, LEFS
Weeks 24+	<ul style="list-style-type: none"> • Begin impact training once cleared by MD (jumping, running etc.) • Unrestricted return to activity (Months 9-12) 	<ul style="list-style-type: none"> • Avoid running/jumping on a painful or swollen knee • Proper form and control during exercise performance 	<ul style="list-style-type: none"> • Advance progressive exercises in all planes • Initiate plyometric activity • Jumping progression (double to single leg) • Return to run program (walk/jog) • Anticipated final visit: SGYM with testing <ul style="list-style-type: none"> ○ Y- balance ○ Humac testing (90/180 deg/sec) ○ Single leg vertical jump ○ Single leg jump for distance ○ Single leg triple jump ○ FOTO, LEFS

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